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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,550

03/29/2004

Nobuko Yamamoto

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12/16/2009

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EXAMINER

JOHANNSEN, DIANA B

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

12/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,550	Applicant(s) YAMAMOTO ET AL.	
	Examiner Diana B. Johannsen	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 7-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 3, 2009 has been entered.

2. Claims 4-5 have been amended. Claims 4-6 remain under consideration. Claims 1-3 and 7-49 remain withdrawn (see also paragraph 5).

3. In view of applicant's amendment of independent claims 4-5 to require "plural types of" probes "consisting of different types of oligonucleotides" wherein the "different types of oligonucleotides consist of different base sequences selected from SEQ ID Nos. 1 to 14 or the complementary sequences thereof," the prior rejection of the claims under 35 USC 103 is withdrawn and the claims are on new grounds as indicated below. Particularly, while the claims previously required an oligonucleotide consisting of SEQ ID NO: 1 or its complement, the claims now embrace various different types of oligonucleotides that "consist of different base sequences selected from" SEQ ID NO: 1 or its complement (i.e., different fragments of SEQ ID NO: 1 and/or its complement). Applicant's arguments regarding the prior rejection of the claims under 35 USC 103 have been reviewed but are moot in view of the withdrawal of that rejection and the new grounds of rejection set forth below.

Election/Restrictions

4. Applicant's election without traverse of Group I, and of SEQ ID NO: 1, in the reply filed on November 2, 2007 is again acknowledged. Claims 4-6 (to the extent that they are drawn to SEQ ID NO: 1) remain under consideration.

5. Claims 1-3 and 7-49, as well as sequences other than elected SEQ ID NO: 1, remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 2, 2007.

6. Applicant's request for rejoinder of claim 7 upon the allowance of claim 6 (see page 13 of the Remarks of November 3, 2009) is noted. No claims are presently in condition for allowance.

Claim Objections

7. Claims 4-6 remain objected to because the claims encompass non-elected subject matter, specifically, SEQ ID NOs other than elected SEQ ID NO: 1. The claims should be amended such that they are drawn only to the elected invention. Applicant's comment with regard to the objection (at page 12 of the Remarks of November 3, 2009) is noted. The objection is maintained at the present time because the claims continue to encompass non-elected sequences.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Brennan (US 5,474,796 A [12 December 1995]; cited with the Office action mailed January 10, 2008).

The claims as amended are drawn to probe sets including “plural types of” probes “consisting of different types of oligonucleotides” wherein the “different types of oligonucleotides consist of different base sequences selected from SEQ ID Nos. 1 to 14 or the complementary sequences thereof.” It is again noted that the elected sequence is SEQ ID NO: 1; thus, the invention under consideration herein constitutes a set of probes including different types of oligonucleotides that “consist of different base sequences selected from” SEQ ID NO: 1 or its complement. However, it is noted that Brennan et al teach a microarray comprising all possible 10mers, such that the Brennan et al reference is in fact anticipatory with regard to fragments of each of the SEQ ID NOs (and the complements thereof) recited in the claims, as well as numerous combinations thereof.

10. Brennan discloses a microarray comprising a complete set of all possible 10-mers (see entire reference, particularly Example 4, col 9, lines 48-60). As the set of 10-mers taught by Brennan includes all possible 10mers, Brennan's microarray inherently includes probes and probe sets meeting the structural requirements of the instant claims (i.e., including plural types of probes consisting of different types of oligonucleotides, wherein the different types of oligonucleotides “consist of different base sequences selected from” SEQ ID NO: 1 or the complement thereof). Further, the

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probes and probe set of Brennan could be used to “detect an existence of a 16s rRNA gene originating in *Staphylococcus aureus*” in a sample (comprising *S. aureus* alone or in combination with one or more other types of bacteria of the claims) by methods known in the art, such as the sequencing by hybridization described by Brennan (see Example 5, col 9, line 14-col 10, line 5). It is noted that the claims are not drawn to methods in which probes/probe sets are actually employed in a particular way, but rather merely require probes/probe sets that are able to “detect an existence of a 16s rRNA gene originating in” *S. aureus* in some manner. A recitation of the intended use of a claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (see MPEP 2111.02). With further regard to claim 6, the microarray taught by Brennan comprises probes that are “chemically immobilized on a carrier” (see, e.g., Example 4, referencing examples 1-2). Thus, Brennan anticipates the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diana B. Johannsen whose telephone number is 571/272-0744. The examiner can normally be reached on Monday-Friday, 8:30 am-2:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached at 571/272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diana B. Johannsen/
Primary Examiner, Art Unit 1634